



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/612,722

07/02/2003

Tanveer R. Khondker

884.926US1

3789

7590

07/12/2004

Schwegman, Lundberg, Woessner & Kluth, P.A.
P.O. Box 2938
Minneapolis, MN 55402

EXAMINER

NGUYEN, MINH T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,722	Applicant(s) KHONDKER ET AL.	
	Examiner Minh Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-15 and 23-29 is/are allowed.
- 6) ☒ Claim(s) 1,5,16,18 and 21 is/are rejected.
- 7) ☒ Claim(s) 2-4,6,17,19,20 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: the summary of invention section and its header are missing.

Appropriate correction is required.

Claim Objections

2. Claims 15-16 are objected to because of the following informalities:

In claim 15, line 2, "the internal signal" should be changed to -- the internal clock signal -
-, see line 10 of claim 7.

In claim 16, line 3-4, "the clock generator" should be changed to -- the external clock
signal --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 16, 18 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,756,827, issued to Konuk et al.

As per claim 1, Konuk discloses a circuit (Fig. 4), comprising:

at least one phase lock loop (20, see column 4, line 60) to generate at least one core signal having multiple cycles within one cycle of an external signal (the core signal is N1 and the external signal is CLK_REF, see column 4, lines 56-57, the frequency of N1 is higher);

a ratio decoder to decode a programming code (pulse counter circuit 34, the programming code is programmed to the register R1, column 8, line 22-24, the comparator circuit 40 is used to decode, column 7, lines 6-9); and

an alignment unit (converter circuit 36, flip-flops 22 and 30) coupled to the at least one phase lock loop (20) and the ratio decoder to synchronize (by flip-flops 22 and 30) a plurality of propagation pulses with the external signal based on the programming code.

As per claim 5, the recited math unit reads on the comparator 40.

As per claim 16, this claim is rejected for the same reasons noted in claim 1. Further, the recited system is disclosed in column 11, line 35-36, i.e., computer system, the recited clock generator is the clock generator to generate the clock signal CLK_REF, the recited DRAM is disclosed in column 8, lines 41-42, and because a computer system includes a plurality of integrated circuits, the limitation recited on lines 5-6 is met, the one including the elements recited on lines 7-11 is shown in Fig. 8.

As per claim 18, the recited limitation is inherently met since Konuk's system is a computer system.

As per claim 21, this claim is rejected for the same reason noted in claim 5.

Allowable Subject Matter

4. Claims 7-15 and 23-29 are allowed.

Claims 7-15 are allowed because the prior art of record fails to disclose or suggest the inclusion of a master pulse generator, propagation pulse generator and compensator connected as recited in claim 7.

Claims 23-29 are allowed for the same reason noted in claim 7.

5. Claims 2-4, 6, 17, 19-20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-4 and 6 are allowable because the prior art of record fails to disclose or suggest the inclusion of a master pulse generator to generate the master pulse having the recited characteristics, or propagation pulse generator having a counter and a reset unit in the alignment unit or a selector in the ratio decoder as recited in claims 2 or 3 or 6.

Claims 17-19-20 and 22 are allowed for the same reasons noted in claims 2-4 and 6.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Nguyen whose telephone number is **571-272-1748**. The examiner can normally be reached on Monday, Tuesday, Thursday, Friday 7:00-5:30.

Art Unit: 2816

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



7/9/04

Minh Nguyen
Primary Examiner
Art Unit 2816